AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q88894

Application No.: 10/541,756

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

(canceled).

(canceled).

3. (currently amended): A Doherty amplifier comprising:

an input terminal;

input branching circuit means for distributing a signal applied from said input terminal to

a first path and a second path;

a carrier amplifier for amplifying a signal distributed to the first path by said input

branching circuit means;

a peak amplifier for amplifying a signal of a predetermined level or higher among signals

distributed to the second path by said input branching circuit means;

output combining circuit means for combining an output of said carrier amplifier with an

output of said peak amplifier; and

a gain compensator disposed at a position ahead of said peak amplifier in the second path

for changing a gain in accordance with the level of an input signal in order to correct the level of

the signal distributed to the second path,

said carrier amplifier and said peak amplifier being devices having the same

characteristics,

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said peak amplifier having a gain smaller than an ideal gain,

wherein said gain compensator has a larger gain, when a signal equal to or higher than

the predetermined level is applied, than a gain when a signal lower than the predetermined level

is applied, said gain being set based on a transfer conductance of said peak amplifier, and

said gain compensator comprises a parallel circuit comprising an anti-parallel diode and a

resistor, or a parallel circuit comprising a diode and a resistor, or a FET, or a bipolar transistor.

4. (canceled).

(canceled).

(canceled).

7. (previously presented): The Doherty amplifier according to claim 3, wherein said

carrier amplifier and said peak amplifier are each composed of an FET, and said gain

compensator compensates said peak amplifier for a gm characteristic.

8. (new): A Doherty Amplifier of claim 3 wherein:

said input branching circuit includes a one-quarter wavelength transmission path.

9. (new): A Doherty Amplifier of claim 3 wherein:

said output combining circuit includes a one-quarter wavelength transmission path.

10. (new): An amplifier comprising:

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a carrier amplifier for amplifying a first signal derived from an input signal;

a peak amplifier for amplifying a second signal derived from the input signal;

an output terminal outputting a third signal obtained by combining an output of said carrier amplifier with an output of said peak amplifier; and

a gain compensator disposed at a position ahead of said peak amplifier for changing a gain in accordance with the level of the input signal,

said carrier amplifier and said peak amplifier are devices having a substantially similar gain characteristic,

said peak amplifier having a gain smaller than an ideal gain,

wherein said gain compensator has a larger gain, when a signal equal to or higher than the predetermined level is applied, than a gain when a signal lower than the predetermined level is applied, said gain being set based on a transfer conductance of said peak amplifier, and

said gain compensator comprises a parallel circuit composed of an anti-parallel diode and a resistor, or a parallel circuit composed of a diode and a resistor, or an FET, or a bipolar transistor.

11. (new): The amplifier according to claim 10, wherein said carrier amplifier and said peak amplifier each comprise a FET, and said gain compensator compensates said peak amplifier for a gm (transfer conductance) characteristic.

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